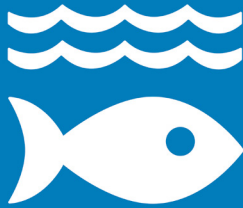




## Life Below the Water

### 14 LIFE BELOW WATER



**“By 2030, 193 Heads of State and Governments agree to conserve and sustainably develop the use of oceans and seas by –**

- **minimizing the impacts of ocean acidification**
- **ending overfishing, unregulated fishing and destructive fishing practices and eliminating the subsidies that support these practices – and –**
- **reducing marine pollution of all kinds, in particular from land-based activities.”**

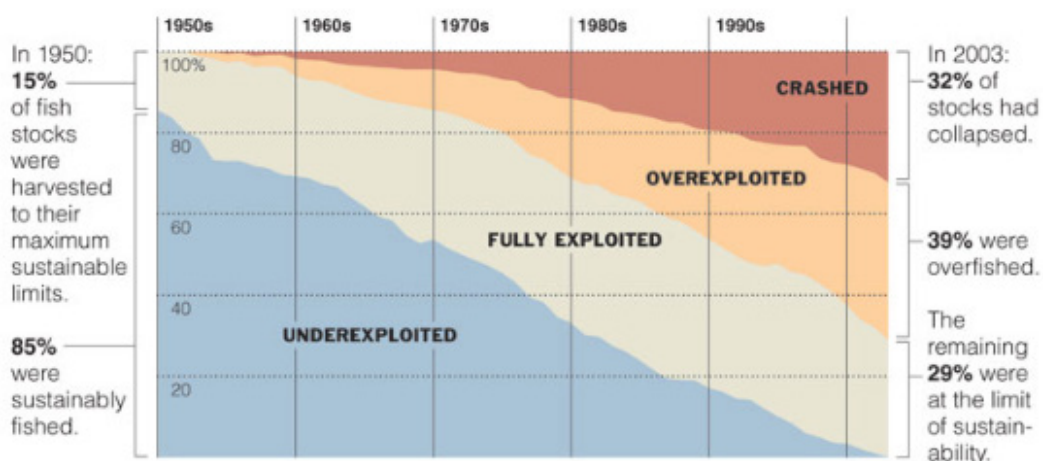
UN Sustainable Development Goal 14

**Good News:** Fish supports the livelihoods of over 3 billion people worldwide and the market for fish is valued at around USD\$3 trillion per year.

**Bad News:** since 1950, 71% of the world’s fish stocks have crashed or been overexploited. And 98% the world’s coral reefs have died or seriously deteriorated.

### At the Breaking Point

The condition of the world’s fisheries has declined drastically because of overfishing.



Source: Sea Around Us Project ([seararoundus.org](http://seararoundus.org))

BILL MARSH/THE NEW YORK TIMES

Protecting Life Below Water is vital to protect the livelihoods of current and future generations who rely on fish from the sea to survive. Marine and coastal ecosystems must be protected, and measures taken to restore fish stocks – which, following the guidance of the Marine Stewardship Council and others, it is now possible to do. Damaging fishing practices, like dynamite fishing, must be outlawed and the ocean’s plastic island + the problem of ocean acidification must be addressed urgently.



## Balance Sheet

### Achievements

An estimate for the value of marine resources puts it at around **USD\$3 trillion per year**. This supports the livelihoods of over 3 billion people worldwide. (1)

Between 2012 and 2018, **104 of 220** monitored coastal regions showed improved water quality - pollution is not inevitable, and damage can be repaired. (3)

In 2017, **17% of national waters** worldwide were some kind of protected conservation zone. This is double the figure from 2010.

The 'Agreement on Port State Measures' aims to combat illegal and unregulated fishing. **87 countries** (including the EU nations) are signatories, as of March 2019

### Work Left to Do

Only 29% of fish stocks are managed at sustainable levels, down from 85% in the 1970s. In places like the Mediterranean, the figure is as low as 38%. (3)

Nearly 40% of the oceans are under threat from heavy pollution, habitat destruction (especially along the coasts) and depleted fish stocks. (1)

Since pre-industrial times, ocean acidity has increased by 26% due to dissolved CO2. Acidic waters threaten vulnerable species such as coral reefs and the communities they support - many of these species may have economic and cultural importance. Coral reefs also shield coastlines from large wave action - flooding and tsunamis could become more impactful in the future. (3)

Marine nitrate levels have shown a 36% increase from 1990 levels, globally, due to agricultural and industrial pollution. Nutrient enrichment can lead to toxic effects, disproportionately affecting larger species. (4)



## Achievements

UNESCO has set up an inter-governmental panel to monitor and seek ways to prevent Harmful Algal Blooms with better monitoring and understanding of the causes of HAB – and sharing solutions with all. (9)

In a survey, **72% of countries** have regulations in place to support small-scale fisheries. (2017) (3)

The oceans have a buffering effect on climate change: they absorb around **30% of all CO2 emissions**. (1)

## Work Left to Do

Harmful Algal Blooms(HABs) or Red Tides are increasing. They cause billions of dollars worth of damage to coastal areas and fisheries: they poison and suffocate fish and shell-fish, cause disease and smells.(9)

However, of these countries, over 20% have yet to fully implement these policies - progress needs to be accelerated. (2)

Globally, over 1800 fish species (21% of those species assessed) are at risk of extinction, as estimated by the IUCN in 2010. (5)

Global plastic production has risen 200-fold since 1950 – from 2m tonnes to 381m. Over the years, this amounts to 1 tonne of plastic for each human-being on the planet. Tonnes of this ends up in the Ocean: the Great Pacific Garbage Patch (GPGP) has 1.8 trillion pieces of plastic and covers an area three times the size of Spain. (8)



## Sources

1. [UNDP - SDG14](#)
2. [SDGs Knowledge Platform - SDG14](#)
3. [SDGs Report 2019 - Section 14](#)
4. [Pacific Institute Water Quality Facts](#)
5. [Center for Biological Diversity - The Extinction Crisis](#)
6. [The 2030 Agenda](#)
7. [Nature 568, 387–390 \(2019\)](#)
8. [Our World In Data](#)
9. [UNESCO – Intergovernmental Panel on Harmful Algal Blooms Report](#)

## Points to Ponder

- What can we use to replace plastic? David Attenborough's [Blue Planet](#) series highlighted the massive problem of plastic pollution in our oceans – and the sheer volume of plastic in the world makes it likely to be a problem for many years to come – until something as cheap and effective as plastic comes along for packaging etc.
- Coral reefs (see below) are some of the most beautiful, magical features of our planet – and yet they are all dying due to ocean acidification, another result of human carbon emissions and thus called “the Evil Twin of Climate Change.” We must stop it. HOW??
- Fish-farming is a \$100 billion dollar a year industry that provides about 50% of the world's fish. China produces 62% - so how can other countries catch up? And what are the problems associated with doing more of it?





## Take Action

- Reduce your use of Plastic – and eliminate completely single-use plastics from your life! Recycle or re-use any plastic you do have.
- Make sure that every fish you buy is caught or farmed in “sustainable fisheries” – and has the [MSC Blue Fisheries Standard](#) mark on the packet.
- Do a beach clean-up: Most plastics in the ocean turn up on a beach sometime – catch it and recycle it before it gets back in the ocean.
- Never buy a fish or product that harms ocean life – like coral bracelets, tortoise-shell hair slides etc. or endangered fish species – like Atlantic bluefin Tuna and halibut.



*Coral Reefs – one of the seven wonders of the Natural World*